

CLAIMS:

1. A method of delivering a composition to a substrate the method comprising at least the steps of:
 - a. heating a target zone of a substrate; and
 - 5 b. applying a composition to a surface of the substrate comprising or immediately adjacent to the target zone;wherein the composition is at a temperature below that of the target zone of the substrate.
2. A method of claim 1 wherein the substrate is organic.
- 10 3. A method of claim 2 wherein the substrate is lignocellulosic.
4. A method of claim 3 wherein the substrate is lumber.
5. A method as claimed in claim 3 or 4 wherein the lignocellulosic substrate is substantially dry.
6. A method as claimed in claim 3 or 4 wherein the lignocellulosic substrate
15 contains a level of moisture.
7. A method as claimed in any one of claims 1 to 6 wherein the target zone of the substrate is heated and held at an elevated temperature for a period prior to application of the composition.
8. A method as claimed in claim 6 wherein the method further comprises the step
20 of controlling loss of moisture from the target zone of the substrate during step a) or during any period within which the target zone of the substrate is held at an elevated temperature.
9. A method of claim 7 or 8 wherein the period of time the target zone of the substrate is held at an elevated temperature is a time sufficient to substantially
25 heat the target zone to a uniform temperature.
10. A method as claimed in claim 9 wherein the period is a time sufficient to sterilise at least a target zone of the substrate.
11. A method as claimed in any one of claims 1 to 10 wherein the target zone of the substrate is heated to a temperature such that there is a temperature
30 differential of at least approximately 80 degrees Celsius between the target zone and the composition at the time of application.
12. A method as claimed in any one of claims 1 to 11 wherein the target zone of the substrate is heated using a heating fluid.
13. A method as claimed in claim 12 wherein the fluid is a gas or liquid.
- 35 14. A method as claimed in claim 13 wherein where the fluid is hot water.

15. A method as claimed in claim 13 wherein the fluid is hot air or steam.
16. A method as claimed in claim 15 wherein the steam is saturated steam or high pressure steam.
- 5 17. A method as claimed in any one of claims 1 to 11 wherein the target zone of the substrate is heated using radio frequency energy or microwave energy.
18. A method as claimed in of any one of claims 1 to 17 wherein the composition is a biocidal composition.
19. A method as claimed in any one of claims 1 to 17 wherein the composition is one which imparts properties of higher density or strength to at least a target zone of the substrate.
- 10 20. A method as claimed in any one of claims 1 to 17 wherein the composition is a waterproofing composition.
21. A method as claimed in claim 19 or 20 wherein the composition is of a polymeric or pre-polymeric nature.
- 15 22. A method as claimed in any one of claims 19 to 21 wherein the composition is an aqueous solution.
23. A method as claimed in any one of claims 1 to 22 wherein the composition is applied to the substrate by one or more of dipping, deluging, spraying, or brushing.
- 20 24. A method as claimed in any one of claims 1 to 23 wherein application of the composition occurs under vacuum or positive pressure conditions.
25. A method as claimed in any one of claims 1 to 24 wherein the composition is applied at ambient temperature.
- 25 26. A method of any one of claims 1 to 25 wherein pressure conditions are controlled during step a.
27. A method of delivering a biocidal composition to a lignocellulosic substrate, the method comprising at least the steps of:
- 30 a. heating a target zone of the lignocellulosic substrate; and
- b. applying a biocidal composition to a surface of the substrate comprising or immediately adjacent to the target zone;
- wherein the biocidal composition is at a temperature below that of the target zone of the substrate.
28. A method as claimed in claim 27 wherein the lignocellulosic substrate is freshly felled and debarked logs or freshly sawn lumber.

29. A method as claimed in claim 27 wherein the lignocellulosic substrate is processed or milled lumber.
30. A method as claimed in claim 29 wherein the lumber is high temperature kiln dried lumber.
- 5 31. A substrate treated in accordance with a method of any one of claims 1 to 30.